CHAPTER TWO

LITERATURE REVIEW

This chapter presents literature review of themes related to the topic such as the relationship between language and communication, characteristics of individuals with autism, conversational skills of children with autism, conversational analysis, speech act theory, theories of pragmatics and pragmatic disability.

2.1 LANGUAGE AND COMMUNICATION

2.1.1 Language development and functions

Language and communication are intertwined. Language is a tool for communication. Human beings communicate with language in verbal and non-verbal forms and it is made up of five components which are phonology, semantics, syntax, morphology and pragmatics (Reed,1994). Language helps us to express our needs, thoughts, feelings and everything that makes us human.

Language develops in children through their interaction with people and the environment. There are many factors affecting the rate at which a child develops language. First, when a child is learning other skills such as standing or walking, his language development will slow down. The bulk of the child's concentration and energy may be going to the gross motor development with little reserve for the development of language. Next, the rate of language development may be affected by the amount and kind of language the child hears. A child growing up in a bilingual speaking family may take a longer time to talk as his or her brain is trying to learn two sets of vocabulary, process two sets of speech sounds and understand two sets of grammatical rules. In addition, the rate of language development may also be affected by how people respond to the child. For example, a child whose communication attempts are greeted with eye contact, acknowledgement (example, "Uh huh. Tell me more. What else happened?") and expansion of his or her ideas is likely to develop language faster than a child whose communication attempts receive little or no response.

Language serves several communicative functions :

- 1. To greet and to express various social routines.
- 2. To regulate (which includes language used to control, persuade, request, convince, nag, correct, criticize, threaten, demand, etc).
- 3. To exchange information (which includes language used to question, inform, describe, assert, state, explain, answer, etc).
- 4. To express feelings (which includes language used to express being happy, excited, sad, frightened, angry, mad, hurt, as well as to protest and to feel good).
- 5. Imaginative function (which includes language used in games and fantasy as well as figurative and artistic language).
- 6. Metalinguistic function. This includes the use of language to analyze language. (Reed,1994)

2.1.2 Communication development and functions

Communication is a process of exchanging information and ideas. According to Strawson (1950), it is an intention of the speaker to produce some effect on his audience. It involves encoding, transmitting, and decoding intended messages. There are many means of communicating such as through writing, signing, and augmented speech.

Communication can take place in verbal and non-verbal forms. The processes involved in communication is illustrated below.

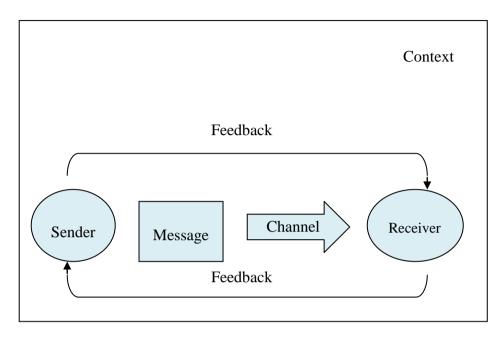


Fig. 2.1 Process of communication

The figure above shows that communication starts with a message in mind and then transmitted to the receiver (listener) via a channel (for example, in the form of speech or a sign language). The receiver simultaneously receives the information, encodes it in his brain and responds accordingly. The receiver now will become the new sender (speaker) and will respond with an utterance related to the previous speaker. Once the receiver has decoded the message into the sender's intended concept, turntaking will take place. Communication is made up of three components known as content, form and use. These three components are interrelated and that the absence of either one of them will disable a person from communicating effectively. This explanation is illustrated in the diagram below:

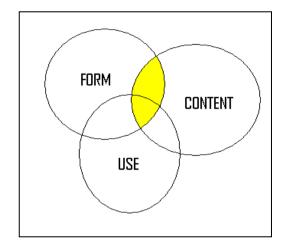


Fig. 2.2 Relationship between components of communication

Form refers to syntax, morphology, and phonology. Content refers to semantics and use refers to pragmatics. These three major components interact with each other but when one component is detached from the rest, the other interaction may also suffer from some impairment (Lahey and Bloom, 1977). When this happens, a child may suffer from either one of the three communication disorders or all of the components disorder : disorder of content, disorder of form, and disorder of use.

2.2 AUTISM

2.2.1 Defining autism

Autism is a neurodevelopmental disorder that has wide a range of conditions. However, all those affected tend to show three general features known as Triad of Impairments.

1. Impairment in social interaction, manifested by impairment in the use of nonverbal behavior, lack of spontaneous sharing, lack of socio-emotional reciprocity, and/or failure to develop peer relationships.

2. Impairment in communication, manifested by delay in or lack of development of spoken language and gestures, impairment in the ability to initiate or maintain conversation, repetitive and idiosyncratic use of language, and/or lack of pretend play.

3. Restricted repertoire of activities and interests, manifested in preoccupation with restricted patterns of interest, inflexible adherence to routines, repetitive movements, and/or preoccupation with pairs of objects.

(Wing and Gould, 1997)

Children with autism also display restricted and repetitive patterns of behaviour. These children, however, have considerable individual variations in the manner and depth of autistic characteristics being manifested. Autism is not just one disorder with a well defined set of symptoms but it is a broad spectrum of disorders that range from mild to severe and is commonly known as 'autistic spectrum disorders (ASD)'. The American Psychiatric Association (APA) defines autism as "a pervasive developmental disorder which is characterized by impairments in communication and social interaction and restricted, repetitive and stereotypic patterns of behaviour, interests and activities" (1994). Next, the association called Individuals with Disabilities Education Act (IDEA) of America defines autism as "a developmental disability significantly affecting verbal and non-verbal communication and social interaction, usually evident before age 3, that adversely affects a child's educational performance. Characteristics of autism include irregularities and impairments in communication, engagement in repetitive activities and stereotyped movements, resistance to environmental change or change in daily routines and unusual responses to sensory experiences" (1991).

Children affected by this syndrome appear to develop normally for the first two years of life. Many of them are assessed at the age of three because of the unavailability of autistic testing kit for children below this age group. This scenario has improved with the development of a diagnostic tool by Dr. Cohen (1995) for early detection of autism. This checklist is called CHAT or Checklist for Autism in Toddlers and can be used on eighteen month old toddlers. It identifies deficits in specific behaviors which are indicative of autism such as pretend play, following the gaze of others, pointing to indicate objects rather than to obtain an object, exhibiting social interest, and social play. A sample of CHAT is attached in Appendix 3.

2.2.2 Theories on causes of autism

The cause of autism is still unknown. Medical professionals are still puzzled by the myriad of symptoms displayed by sufferers of this syndrome. There could be many causes of autism perhaps, as many as the symptoms. It is a heterogeneous behavioral disorder that may have roots in several etiologies. At the moment, professionals in this field rely only on theories of its causes.

The first theory assumes that autism could be caused by complication during the process of fertilization, embryological development, childbirth, or infection to the central nervous system. During pregnancy, the fetal brain is growing and new cells, specialized regions and communication network form. Any disruption during the gestation period could affect the normal brain development which may produce autistic like symptoms when the child is born. Viral infections such as rubella (German measles) particularly, during the first three months of pregnancy and lack of oxygen to the baby at birth and other complications during the delivery may also increase the risk of autism.

The second theory speculates on the relationship between autism and measles, mump and rubella vaccines (MMR). There have been many reports that claim many of the children show regression after receiving this vaccine. It is reported that this vaccine can cause gastrointestinal problems, yeast overgrowth and bowel diseases in some infants. In addition, some children develop allergy to wheat (gluten) and protein (casein) after receiving this vaccine. When they consume food containing these items, they show inappropriate reactions such as giggling, moodiness, hyperactivity, fidgeting and other autistic behaviours. The third theory focuses on immaturity of senses (sensory dysfunction). Normal human beings receive information from the five sensory organs namely sight, smell, touch, hear, and taste in order to make them function and know their whereabouts in this world. In contrast, autistic individuals often have dysfunctional senses which are unable to send information to the brain. For example, most autistic children are hyposensitive or hypersensitive to touch. Some of them scream when putting on clothes because their skin cannot tolerate cotton or wool. Some cannot stand the sound of rain drops as it sounds like sand drops on glass surface. Some cannot tell the difference between the smell of tea and roses because they can only identify strong odor. Dr. W. F. Windle (1969) concluded that one of the causes of sensory dysfunction is the lack of oxygen at birth. This causes injury to the brain and subsequently causes havoc to the central nervous system.

The fourth theory focuses on the excessive use of antibiotics as the cause of autism. This theory was proposed by Dr. William Shaw (1998), one of the leading authorities in autism and a well-known researcher on the gastrointestinal tract. He indicated that many children with autism have low immune tolerance due to excessive use of antibiotics at an early age. Generally, these children have yeast overgrowth. Their bodies are not able to overcome these undesirable bacteria as they have low immune system. They lack an antibody called secretory IgA which coats the intestinal tract and prevent harmful bacteria from growing on it. These bacteria produce toxins which create symptoms like stomach upset, dizziness and incessant laughter.

All of the above theories are only speculations on the possible causes of ASD which have helped researchers to assemble an impressive amount of information and has brought many issues regarding autism into focus. Although each theory postulates a

separate explanation of ASD there is however, a general consensus among the researchers that the cause of autism is a neurophysiological rather than environmental in nature (Menyuk and Wilbur, 1981).

2.3 COMMUNICATION AND AUTISM

This is the biggest problem among the triad of impairments mentioned earlier. Children with autism are not able to communicate their feelings appropriately because of their language deficits (Lucas, 1980). This results in frustration that subsequently affects their social skills. Autistic children communicate in a bizarre manner for example, they come very close to their conversational partner or looking away while talking. Their utterances are sometimes gibberish or non-audible to others around him; contain repetitive words or syntactic errors. In addition, children with autism can often memorize words and phrases quite well and then echolalize these lines.

Some children with autism develop speech and some remain non-verbal. For the verbal group, their speech is often incomprehensible, contains a lot of mumbling and nonsense words. However, many of them develop good pronunciation and grammatical knowledge. Since their utterances are short and mainly contain concepts for example, "paper" (instead of I want paper), "drink" (instead of "can I have a drink") instead of longer utterances, they seldom commit syntactic errors in their daily conversation.

For the non-verbal group, they depend on sign-language and other means of facilitated communication that has keyboard such as computer, a specialized augmentative communicative device or electric typewriter. A non-keyboard method would be PEC (picture exchange communication) where the children communicate by showing picture cards that represent their needs (for example, a star could represent something rewarding, a pillow represent sleepiness, etc.)

2.3.1 Sociolinguistic Skills in Children with Autism

Sociolinguistic skills refer to the ability to use language with the appropriate social meaning and the ability to recognize language variation. It is the competency that every person must possess in order to function well in a society. Some of the conversational skills required in a social interaction are spontaneous speech, simple word associations, contingent words, pretend play, building analogies, easy topical conversation, finding out about some one and joint attention. According to Theresa (2004) these skills are sorely lacking in children with autism. She conducted a study on the sociolinguistic skill of an autistic teenager and discovered that the subject lacked the pragmatic ability to conduct a meaningful conversation. Although the subject possessed a reasonable language proficiency, his manners during the conversation reflected that he did not know the normative behaviours in a social interaction. This led to frequent misunderstanding between the subject and his caretaker, school teacher, sibling and his classmates. The subject often got frustrated and vented out his frustration through physical actions.

2.3.2 Conversational skills of children with autism

Children with autism conversation tend to miss many rules of conversation that are proposed by SSJ and Grice. This phenomenon according to Lucas (1980) is more of manifestation of pragmatic disability rather than language deficit. They prefer to follow rather than to lead in a conversation; they seldom initiate conversation and are incompetent at gaining and directing the attention of the conversational partner (for example, making eye contact, pointing or showing objects). These elements that are missing are more of pragmatic deficits rather than language deficits. As mentioned earlier, the idiosyncratic features in the conversation of children with autism are implications of pragmatic disability. This brings the discussion to the next theme which is pragmatic disability and autism.

2.3.3 Pragmatic skills of children with autism

Several studies have been conducted on the pragmatic skills of autistic children for example, Kubicek (1980) carried out a study on the preverbal skills of children who later were diagnosed as autisitic. Kubicek who proposed that the preverbal skills are prerequisites for later development of language and social skills found that these children have already lost this prerequisite skills at an earlier age. He further reiterated that a lot of the symptoms of autism can be rooted in the infancy stage by observing their pragmatic skills. Parents of autistic children who could recall how different their children were as babies claimed that their children never put their hands out to be carried, did not like to be cuddled, screamed a lot, slept very little, did not look at their parents and did not want solid food till much later. In short, these children were passive infants; and this factor carries a significant and cumulative impact on their later development. Another research on preverbal skills of potential autistic children was carried out by Ricks (1975) who discovered that autistic children express requests, frustrations, greetings and surprise using idiosyncratic forms of expression rather than using expressive noises common to most babies. They applied unusual pragmatic skills to get their message across.

Research on pragmatic skills of verbal autistic children have also been carried out by several researchers namely Wetherby and Prutting (1984) and Conti-Ramsden (1992). Wetherby and Prutting conducted a study on communicative functions of four autistic children versus normal children. They found that autistic children showed a high frequency of requesting for objects and actions, protesting and non-focused utterances. On the other hand, normal children displayed a broader range of functions when they communicate such as to acknowledge others, show off, comment, regulate their behaviour, label referents, and accompany familiar actions with sound effects or ritualized vocalizations. They further pointed out a significant remark on the communicative skills of autistic children by saying that these children develop communicative functions sequentially, rather than concurrently as in normal children. The earliest functions they develop are request for objects and actions.

Communication for social purposes such as acknowledgement of others, commenting and show off appears later in some autistic children and in some, these skills never appeared. In contrast, normal children can combine several functions concurrently when they speak.

Conti-Ramsden (1990) noted that children with autism experience the biggest difficulty in the pragmatic aspect of the conversation more than the linguistic aspect. They tend to use a lot of questions to obtain response from their conversational partners; they repeat similar utterances as a way to initiate conversations and they tend to speak loudly in public places. Lucas's (1990) finding showed that autistic children tend to join in conversation without proper opening, change topics frequently and have problem with turn-taking. The children do not know when to join in a conversation. She too agreed that many of the autistic children have problems with the pragmatic aspect of conversation instead of the language aspect.

2.4 DEVELOPMENTAL PERSPECTIVE OF AUTISM

The developmental perspective discipline investigates cases on normal and abnormal development concurrently. This approach provides a clearer picture of the differences in terms of development between normal people and people affected by disability and therefore, the researcher finds that this discussion is relevant for this study. Developmental perspective looks at human development in the following areas which are physiological, perception, cognition, social skills and emotional understanding.

2.4.1 Physiological, perception and cognition

Parents of autistic children report that their children appear to grow as normal as their other children before the age of two. Their sleeping and awake hours seem to be regular. It is only after the second year that they appear to be overactive and over stimulated. They claim that after this age their autistic children start to have erratic sleeping pattern and they appear to sleep very little. In terms of physical and motor coordination features, autistic children display well-developed physical skills. In fact, many autistic children are precocious, very agile and have boundless energy compared to normal children. By the age of two, many autistic children show signs of sensory impairments. For example, some parents reported that their children appeared to be deaf. They have to call out to their children so many times to get their attention. In addition, sounds that may seem normal to us may be aversive to them. So, they shut themselves from this aversive sounds such as the sound of a vacuum cleaner and sound of a baby crying. Next, autistic children may smell inedible objects habitually, or flick papers to see the paper movement. Their response to external stimuli may range from crying, maniacal laughter, aggression, and closing their eyes.

In tandem with their sensory, motor and perceptual development, autistic children also develop understanding of objects much like the normal children albeit slowly. They recognize shape, colour and function of objects like the normal children but use the objects in unusual ways. They manipulate the same aspect of a toy over and over again for example, spinning the wheel of a toy car repeatedly or arranging toys in a straight row instead of playing with the toy. They have very limited pretend play. When given a toy such as a comb, an autistic child will not use the comb to brush her doll's hair but instead will bang the two items together.

2.4.2 Social and emotional understanding

While normal children are predisposed to engage with people, develop attachment to their caregivers and respond to social stimuli, autistic children behave the opposite. They are known to be withdrawn, engage in self-stimulatory activities, avoid face-to-face interactions with other people as well as their own parents. This trait makes autistic children less likely to refer to other people, to respond to objects and events, to observe other people's emotion, and to copy appropriate behaviors. The effects of insufficient social referencing behavior such as mentioned will be farreaching and cumulative. It will affect the life of these children in other aspects. In terms of emotional development, autistic children display similar emotions as normal children. They know how to be angry, happy, sad, and scared albeit the degree of expression. Autistic children tend to exacerbate their expression and showed negative emotions more often than positive emotions.

The emotional expression of autistic children is somewhat complex. Their emotions changed drastically in a matter of a few minutes for example, they could be laughing hysterically this minute and in the next minute, they could be rolling on the floor furiously. Another striking feature of the emotional response of autistic children is that they do not combine looking with smiling. In face-to-face interactions, they do not smile when they look. In addition, autistic children do not look towards their parents and smile when they have accomplished a task. Instead, they avoid gaze and shift their bodies away from those applauding them. Autistic children also have difficulty matching facial and vocal expression of emotion. According to Hobson (1990), even high-functioning autistic adolescents had difficulty to match the prosodic and linguistic expressions of sadness, happiness, anger, and surprise with facial expressions in their speech.

Given their difficulties with emotional expression and recognition, autistic children also lack capacity to emphatize with other people. Sigman & Capp (1997) studied a group of autistic children, mentally retarded children, and normal children in a scene where their mothers pretended to be ill. The normally developing children and the mentally retarded children approached their parents and looked into their faces. They appeared concerned and attempted to soothe their mothers. In contrast, autistic children seemed uninterested in their mothers' well-being and oblivious to the display. In short, this discussion has provided us general developmental similarities and differences between normal children and autistic children.

2.5 LANGUAGE DEVELOPMENT OF CHILDREN WITH AUTISM

Children with autism develop language in the same order as normal children but at a slower rate. Some of them make their first sound at the age of five, some produce their first word at the age of six and some produce their first sentence at the age of eight. In addition, if they do develop language, it is only for functional purposes. They do not use language for social interaction as normal people. They will always have problems communicating with others throughout their lives. Although they may use words and grammatical structures correctly, their speech reflects deficits in comprehension and expression of intents. Since language evolves around linguistic and extra linguistic features namely social communication, which is a major problem for autists, they continue to struggle to express their feelings. As long as the latter remains a problem, the language of autistic individuals will forever be deficit.

The linguistic aspect of autistic syndrome is generally overlooked due to some psychodynamic theories in the 1950s and 1960s. These theoriws viewed autism as resulted from cold, rejecting middle-class mothers who could not communicate with their children thus, causing a voluntary withdrawal. It was not until the 60s, perception towards autism as a language and cognitive disorder became accepted. This breakthrough was brought about by Rimland's book, *Infantile Autism* (1964) which proposed a cognitive model for understanding autistic behaviour. This publication became an important frame of reference for Hermelin and O'Connors (1970) series of studies which suggest that autism represent cognitive disability to interpret stimuli meaningfully. There are many language-related performances in autistic children which are closely related to cognitive ability such as coding, sequencing, and abstraction which they are unable to perform during intelligence test. Other follow-up studies by other researchers in this era such as DeMyer et. al., (1973) all pointed to cognitivelinguistic disorder as the main problem in autism.

However, the 1970s saw a new trend emphasizing language remediation. Following the acceptance of the cognitive and linguistic bases of autistic behaviours, the implications of this discovery and how it affected specific remediation efforts were reviewed and many intervention approaches were developed based on the growing understanding of normal language acquisition and increasing clinical experiences with autistic children.

The 1980s represent another point of crossroads in how we view the language of autistic people and the implications for remediation. The past decade has seen a virtual explosion of research on language and communication processes. Some of the researches have important implications for the teaching of those with severe communication handicaps. The emphasis is to teach communication skills instead of language skills. The 1980s moved us from language therapy to communication training. The emphasis is on tying communication training to a child's specific interests and activities and more emphasis on alternative communication systems such as signing, gesturing, picture cards, or any other system meaningful to a child. The important concept behind this shift in emphasis is that we must teach autistic children language that enhances useful communication for them. We must move from language therapy to communication training.

Much research has proven that autistic people have the desire to communicate except they communicate in an unusual manner. They communicate through strange behaviours such as giggling, deep gazing into the conversational partner's eyes, putting up a blank face or banging their heads on the wall. Some of them develop speech and some of them do not. It is estimated that about half of the children diagnosed autistic never develop functional speech. The bulk of their speech contains echolalia and stereotype language. In other words, they produce speech which are mainly immediate or delayed literal repetition of the speech of others, often without an appreciation of the meaning of utterances involved.

Autistic children learn language in a strange way. They are very good at memorizing units of speech. They are able to reproduce long utterances with precision. They are even able to imitate the intonation pattern. Prizant (1983) termed the autistic language learning style "gestalt language" which refers to memorized multiword utterances that are reproduced as single units without recognition of the constituent structure. Autistic children seem to have major problem with semantic, environmental, and conceptual factors. For the high-functioning group, their problem is pragmatic deficit and for the lower functioning group or nonverbal, they are not able to segment sounds into meaningful units.

Over the years, many approaches to communication in autism have emerged. They can generally be divided into psycholinguistic perspectives and behavioral perspective. Both methods however, aim for the same goal which is to increase the ability of persons with autism to communicate in everyday setting. From psycholinguistic point of view, language is seen as a reflection of cognitive ability. Since language is a complex phenomenon that requires ingenius intelligence from the speaker, it is also considered as a tool for the individual to further development. Psycholinguists believe that language is a guide to cognitive growth. The ability of a child to speak with their limited mental abilities has always remain an intriguing mystery to adults. How does a child who are so immature in so many ways are able to master his native language in a relatively short span of time? By the age of four, most children rapidly become a full-fledged member of their language community. They are able to exercise the same grammar and rules of language as other members of their language community without conscious teaching from their parents (Slobin, 1979). Based on this principle, they associate cognitive ability as a determinant that influences the speech of autistic individuals.

Behavioral perspective on the other hand, aims at increasing the ability of autistic persons to communicate through the use of operant conditioning procedures. In this approach, the use of prompting and reinforcement are emphasized. A child is heavily rewarded when he performs appropriate behaviour. This is the tenet of ABA (Applied Behavioral Analysis) developed by Lovaas (1977). This method is effective to teach productive and receptive labels, grammatical morphemes for example, word ending *-ed* and *-s*, functors for example, *'the'* and *'is'*. Behavioural methods are also said to be effective to reduce inappropriate language such as forms of echolalia or idiosyncratic use of words. Although significant change in reduction of inappropriate behaviour can be seen in children who are undergoing behavioral-based programs, very little improvement can be seen in the development of functional communication. The children are not able to generalize what has been taught in the therapy room. Even the most innovative methods such as incidental teaching which is "spacing trial" does not seem to improve the language spontaneity in autistic children. There are many disagreements on this approach which seems to be designed out of context because no

young children would request the same item 50 times in a row even if they are autistic. Literature on behavioural methods have shown that these approaches emphasize too much repetitions and which is detrimental to their cognitive development. Another weakness of behavioural approaches is its treatment of behaviour or specific language problem in isolation. When this happens, one will not be able to see the more complex aspects of social and language development. In conclusion, behavioural approaches produce positive short-term results and there is little to say about its long-term result for development of functional communication.

2.6 CONVERSATIONAL FEATURES OF CHILDREN WITH AUTISM

Individuals with autism display the same conversational features as normal people except in terms of frequency of the features appearance in their speech. Typical conversations contain features such as turn-taking, topic movement, topic maintenance, repairs, inference from earlier structures, common collocations, overlaps, echolalia, and latching which are similar to speech acts of normal people. The following discussion will elaborate on each one of these features.

2.6.1 Turn-taking

This is indeed the basic characteristic of a conversation. A talk while B listens and when B talks, A listens. Turns at speaking may vary from minimal utterances to several minutes. If there are more members in the conversation, the waiting turn may be longer. Turn-taking works in a predictable manner. Only one person speaks at a time. The speaker and listener look out for sign to end and to step into the conversation. For example, a complete idea or topic, a complete grammatical sentence, hand gesture, paralinguistic indices such as falling intonation, drop in pitch or loudness and a drawl in the final syllable and a prolonged pause are signs for the listener to take the floor. It is a complex co-operative process whereby the speaker and listener coordinate their contribution to minimize overlap and silence (Smith & Leinonen, 1992).

2.6.2 Repair

It is an activity where the speaker locates and replaces a prior information unit. As he focused on prior information or was distracted, he had to reorientate the information again before continuing his talk. Both speaker and listener are subjected to do repairs in a conversation. A listener repairs an utterance to confirm what he has heard before responding. A speaker repairs to ensure he delivers the correct message. In individuals with mental disability, repairing communication breakdown seldom happens. They rarely make request for clarification even when they were presented with inadequate message. In addition, when they were asked to clarify, they rarely respond (Reed, 1994).

All conversations breakdown at some point, and the ability to notice it and to repair this disruptions are an important language competency. This skill is especially important when the speaker's objective is to inform. Both speaker and listener are committed to repair in a conversation. As for the listener, he has to repair what the speaker has said to confirm the accuracy of the message before he responds. Repair is sometimes known as asking for clarification.

Many experiments on referential communication show that children with mental retardation do a poor job of repairing breakdowns in communication. They rarely make requests for clarification when presented with an inadequate message. Likewise, when others make requests for clarification the children rarely respond. Researchers are not able to ascertain the cause of this problem but postulate that it could be due to social reluctance.

2.6.3 Topic maintenance

This is one of the areas that children with would have difficulty with. Due to their age and boisterousness, many of them tend to say so many things in a little time. They jump from one topic to another too fast. In contrast, children with autism are too good at maintaining a topic to the point that they stick to the same topic for days and weeks. One reason for this is that they do not have the ability to expand a topic, provide new information or shades on the subject being discussed. Abbedutto (1991) explained that children with mental disability have this deficit due to their lack of understanding on the social value of maintaining a topic, or they lack the cognitive ability to relate information available to them to the current subject.

2.6.4 Interruption

This refers to disruption of speech. This interruption could be in the form of burst of laughter or bizarre behaviour in between utterances. Another common form of interruption in the speech of autistic people is echolalia where the autistic person repeats himself several times before continuing his utterance. Finally, autistic children like to interrupt a conversation by saying something irrelevant to the context.

2.6.5 Latching

Latching refers to simultaneous start and finish of talk of two or more speakers, such that no interval exists between participants. It is also known as contiguous utterances. Equal sign (=) is used to indicate latching when analysing a conversation. For example,

	i.	Tom: I used to smoke a lot= Bob: =He thinks he's really tough.
pool?	ii.	Max: What does everybody else do at the swimming
		Do they all= Mary: =just have a swim about

2.6.6 Overlap

Overlap and latching usually have a similar distribution within the conversational context. Although they are similar in some sense, overlap reflects that the talk had taken place and can be seen sometimes as signals of a turn initiated for the purpose of repair. Latches on the other hand are a movement forward of the talk in terms of topic. The notation for overlap is marked with left -hand bracket for overlapping utterances but do not start up immediately for example,

i. Max: I used to smoke [a lot Bob: [he thinks he's real tough

The following example is latching by more than one speakers

ii.	Tom:	I used to smoke a lot=
	Bob:	=[[He thinks he's real tough
	Ann	=[[So did I

The following example is latching at the end of overlapped speech

iii. Tom: I used to smoke [a lot]= Bob: [I see] Ann: =So did I The following example is latching within the same speaker's talk

iv. well my son did it=I'm gladjer son didn't get hurt

2.6.7 Topic movement

Topic movement refers to changing to a new topic. Topic movement is acceptable if it is not done so frequently in a single conversation, When it is done too many times, it may offend our conversational partner and make them feel that we are not interested in them. Topics in a conversation should shift gradually over several related utterances. Topics must not end abruptly as this will make the conversation choppy. New topic must have link to the previous and will initiate a new direction after several exchanges. In contrast, children with autism changes topic abruptly. They do not observe the progression of conversation but simply throw in new topic. Abrupt topic movement is a form of interruption that many autistic children have difficulty with. They are not able to maintain their focus within the constraints of the topic initiated by the other speaker (Reed, 1994). They are always anxious to move on due to their high anxiety level.

2.6.8 Repetition

This is a common feature of language characteristic of individuals with autism. They tend to repeat the same word or topic incessantly. Sometimes, they repeat several times in a conversation or in a day or a week. They seem to be stuck with the same word or topic for quite sometime. This could be due to their inability to expand on the topic they wish to talk about and therefore, they feel dissatisfied until the issue is over

2.6.9 Echolalia

Eholalia is a behaviour where the child repeats utterances addressed to them. This behaviour seems to occur in an automatic and unthinking way. This is indeed the salient characteristic of individuals with autism. There are two types of echolalia: immediate echolalia which repeats the exact word after they are spoken, and delayed echolalia, which occurs some time after the words are spoken.

In the past, it was often assumed that echolalia was done without intention; therefore, should be regarded as a sign of language disorder. However, in recent years, echolalia is recognised to be functional and that it does have communicative intent. Prizant & Duchan (1981) analyzed videotape of several echolalic display and discovered that echolalia is a means of expression for example, when the listener's attention is diverted, the child would continuously repeat the word until he gains the listener's attention. Sometimes, autistitic individual use echolalia to fill a conversational turn for example, when he is faced with a listener and it is his turn to talk but there is no word for him to utter.

2.7 CONVERSATION ANALYSIS

Conversation analysis or CA studies behavioural patterns that are going on in oral interaction for example eye gaze, body posture, silence, interruption and nod. It is an approach to the study of talk in interaction which grew out of the ethnomethodological tradition in sociology. The concept of CA was developed by Garfunkel (1967). CA is perceived as sociological enterprise by its originators and not as linguistic or language enterprise. CA was considered more as societal experience and thus, was thoroughly studied by sociologists instead of linguists.

This approach studies the orderliness that take place in a conversation and prescribe the rules of conversation. CA is likened to interactional sociolinguistic by Schiffrin (1994) who explained that CA analyzes the problems of social order, and how language creates and created by social context. Several other conversation analysts after Garfunkel have expanded the scope of CA and proposed own definition of 'conversation' and 'conversation analysis'. Among them are Have, Grice, Schlobinski, SSJ (Sacks, Schegloff and Jefferson), Psathas, Liddicoat and Schiffrin. Their studies concentrate on conversational patterns of normal people. In contrast, there are conversational analysts who study the speech patterns of people with language disorder such as Lucas, Stoke and Menyuk. This group of analysts also possess knowledge in non-linguistic aspects of conversation such as causes of the disorder, psychological and cognitive development of people with language disorder.

In this study, only three perspectives of conversations were used to guide the data analysis namely Grice's, SSJ's and Lucas's.

2.7.1 Grice's perspective

Grice analyzed conversation as exchange of utterances between speaker and listener. According to him, each utterance has two levels of meaning which are known as *linguistic meaning* and *speaker meaning*. He further emphasized that conversation requires cooperation from both participants. Grice's theory explains the rules of conversation where both participants must cooperate in order to keep the interaction going. This cooperation is referred to as Cooperative Principle. Grice analyzed the effectiveness of a conversation based on adherence of the four maxims which are maxims of manner, maxims of quality, maxim of relation and maxims of manner.

Maxims of quantity states that :

- 1. Make your contribution as informative as required.
- 2. Do not make your contribution more informative than required.

Maxims of Quality

- 1. Do not say what you believe to be false.
- 2. Do not say that for which you lack adequate evidence.

Maxim of Relation

1. Be relevant.

Maxim of Manner

- 1. Avoid obscurity of expression.
 - 2. Avoid ambiguity.
 - 3. Be brief.
 - 4. Be orderly.

Grice analysis focused more on the content and pragmatic aspects of a conversation. He stated the importance of analyzing language according to context. Therefore, a person must listen and understand the intended message that a speaker wants to convey. Sometimes an utterance does not represent the underlying message. Thus, a listener must pay attention to the implicit meaning of an utterance or what Grice referred to as implicature. To interpret implicature, one needs to access relevant information from the context (Blakemore, 1992). This process requires sophisticated knowledge of linguistics and cognitive ability, as the listener has to respond spontaneously. In children with autism, who possess low linguistic skill and generally literal, they usually fail to decipher implicature.

2.7.2 SSJ's Perspective

Sacks, Schegloff and Jefferson (SSJ) are linguistic researchers who have done many works on analyzing language in interaction. According to them, there are some processes that should take place in a conversation namely adjacency pair,turn-taking, interruption, repetition, repair and latching. In addition, they also prescribed how to open and end a conversation, gaps and overlaps in conversation. However, these patterns are often missing in the conversation of autistic children.

SSJ's model of conversation analysis hinges on the concept of turn-taking. They believed that turn-taking is the foundation of a conversation. It is the basic element that makes up a conversation and that it is during the process of turn-taking that other features such as gaps, overlaps, silence, interruption and repetition are noted. These features are ways how conversational participants take their turns to speak and keep the conversation going. In contrast, these features are missing in the conversation of autistic children because they do their turn-taking in a peculiar way and not according to the canonical way proposed by SSJ model (Sethupathy, 2004). This study did not analyze all the features mentioned by SSJ but only focused on features that were present in the Y's speech samples.

2.7.3 Lucas's Perspective

In contrast to the above linguists, Lucas works on children with language disability such as autistic, Down Syndrome, schizophrenic and ADHD (attention deficit and hyperactivity disorder). Similar in some ways with Grice, she analyzed the conversational skill of these children in terms of their pragmatic ability rather than linguistic ability. Lucas (1980) found that many of these children particularly, the autistic group, possess reasonable linguistic knowledge but it is the execution of the language that they have problem with. In view of this phenomena, she analyzed the children's conversation from the aspects of knowledge of semantics (meanng) and pragmatics (language use in context). Lucas puts emphasis on these two elements as they represent social skills that are extremely important for these children to master. She also claimed that deficiency in conversational skills has something to do with the child's inability to perform speech act.

All of the above theories feature different focus of interest which are relevant to the need of this study.

2.8 SPEECH ACT THEORY

2.8.1 Defining speech act theory

This theory was introduced by John Austin and has generated great interest in the field of pragmatics. He was a philosopher and had two influential students, Paul Grice and John Searle. Austin was interested in analyzing how people use language in their everyday live instead of correcting language of its imperfections. Since his public lecture at Harvard University in 1955, Austin's works have been revised and modified by subsequent researchers such as Brown and Levinson, Coulthard, Searle, and Atkinson to name a few. They came up with variation of Austin's definition and have since become their own version.

Speech act theory claims that language does more than meaning of words and phrases. Austin believed that we do not use language to say things (to make statements) but to do things (perform actions). He further studied what kind of things we do when we speak for example commanding, interrogating and requesting; and how we do them (Thomas, 1996). He called these behaviours illocutionary acts. Searle (1976) expanded Austin's definition of speech act and incorporated other elements into his definition. He categorized speech acts into macro classes known as declarative. representative, commissive, directive and expressive. Declarative refers to expressions that change the word by their very utterance such as "I declare, I bet and I resign." Representative refers to acts where the words state what the speaker believes to be the case such as "describing, claiming and predicting" (for example, I came, I saw, I conquered). Commissive refers to words which commit the speaker to future action such as 'promising, threatening and refusing" (for example, I'll make him an offer, he can't refuse). Directive refers to words that make the hearer do something such as "requesting, suggesting and forbidding" for example "Please switch on the air-cond." Expressive refers to words which state what the speaker feels such as "congratulating, apologizing and praising" for example "I am proud of your achievement.' Searle further elaborated that every utterance can be analyzed according to three levels. The first level are the words themselves or "what is said". This is the locution; and the act of uttering the words is known as *locutionary act*. The second level is what the speakers are doing with their words that is the functions of the words for example, asserting or requesting. This is called the *illocutionary* force. The third level is the result of the words; the effect on the hearer for example, the hearer gets up and turn off the air-cond. This level is known as *perlocutionary* effect (Cuttings, 2002).

2.8.2 Speech act and children with autism

According to a study conducted by Carter (1979), children actually have started performing speech acts as early as in the first year of life. Their prelinguistic behaviours are reflection of their requests and are carried out intentionally for example, their cries are requests for attention or are expression of hunger. When they extend their hands they are requesting to be picked up and carried. In the second year, these gestures are combined with words or names of desired object such as *want, more* and *gimme*. This ability to perform speech acts however, is missing in children with autism. Autistic children have already loss this ability as early as first year of life. Studies on early signs of autism reflect that babies who are potential autistic do not use gestures or prelinguistic behaviours to perform speech acts (Lapadar, 1991) in the early years of their lives. They are typically quiet babies; show no excitement when approached by their parents and are not able to vary their signals for attention. These abnormal prelinguistic behaviours later become permanent features of children with autism.

Autistic children in general are unable to produce utterances that have perlocutionary effects on their hearer due to their limited range of speech acts. They are able to produce illocutionary effects especially requesting. Another factor that makes the execution of speech act awkward among autistic children is their inability to interpret meaning of utterances because they respond inappropriately in most situation by applying the wrong speech act. Deficit in speech acts can bring detrimental implications on children's social development. They grow up to become less sociable, isolated and depressed. Reed (1994) stated that they become good at responding in a conversation but are poor at initiating conversation, they prefer to follow rather than to lead in a conversation and finally and they are not able to engage in other people's interest. These are some of the challenges and risks that children with autism face when they fail to apply appropriate speech acts in their daily conversation.

2.9 SUMMARY

This chapter has discussed issues related to communication which range from development of communication, language and speech among normal people, language disorders in people with autism, the importance of speech acts and the implications faced by children with speech acts deficit. This chapter has also discussed the components and development of pragmatics; and challenges faced by autistic children in their day to day conversations. The literature review has presented prerequisites of conversational skills which many autistic children have to struggle with.